INTENT TO QUIT PERCEPTIONS OF NURSING ASSISTANTS WORKING IN OKLAHOMA STATE VETERANS ADMINISTRATION-OWNED AND ADMINISTERED NURSING HOMES

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The purpose of this study was to examine a select set of organizational variables and determine their relationship to nursing assistants' intentions to quit in state-owned veterans' long-term care facilities located across the United States.

America's long-term care industry (e.g., nursing homes, assisted living facilities) is a multibillion dollar industry. Because the U.S. government is projecting a 250% increase in the elderly population, staffing these nursing homes and related facilities is a critical concern. A vitally important but often overlooked factor of the long-term care industry is employee turnover.

Of the staff in long-term care facilities, the nursing assistant (NA) position is particularly susceptible to turnover. Approximately 80% of NAs who enter the workforce leave within the 1st year and many leave within the first 3 months of employment. Some facilities report that they are unable to accept new residents because of a lack of qualified NAs. While many studies have researched this issue, staff turnover in long-term care facilities remains a serious and widespread problem.

This study provides a foundation for future research related to the perceptions of intentions to quit of nursing assistants (NAs) working in state-owned veterans long-term care facilities by providing primary data regarding NAs intentions to quit. Results of this study indicate that NA intentions to quit might be reduced provided that pay and

rewards are increased, workplace violence is addressed, and better access to patient care plans is provided.

This research is useful to state-owned and operated long-term care facilities by giving them additional insights into nursing assistants' intentions to quit perhaps resulting in lower rates of turnover. It is suggested that future research be performed using populations of individuals from other segments of the long-term care industry, mainly, for-profit institutional care nursing homes, and federally owned veterans long-term care facilities.

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CHAPTER 1

INTRODUCTION

Background

America's long-term care industry (e.g., nursing homes, assisted living facilities) is a multibillion dollar industry. Because the U.S. government is projecting a 250% increase in the elderly population, staffing these nursing homes and related facilities is a critical concern. A vitally important but often overlooked factor of the long-term care industry is employee turnover. Turnover for nursing assistants (NAs) has been estimated at over 100% (American Health Care Association [AHCA], 2002). For registered nurses (RNs) and licensed vocational nurses (LVNs), turnover rates range between 40% and 70% (AHCA, 2002).

Of the staff in long-term care facilities, the NA position is particularly susceptible to turnover. Approximately 80% of NAs who enter the workforce leave within the 1st year and many leave within the first 3 months of employment. Some facilities report that they are unable to accept new residents because of a lack of qualified NAs (Iowa Department of Human Services, 2000). While many studies have researched this issue (Banaszak-Holl & Hines, 1996; Bowers, Esmond, & Jacobson, 2003; Castle, 2006; Yeatts & Seward, 2000), staff turnover in long-term care facilities remains a serious and widespread problem. The pervasiveness of the NA turnover problem is exacerbated by changes in long-term care industry spending, the aging population, and the segmentation of the industry. The seriousness of the problem can be understood when consideration is given to the duties NAs perform, how they are trained, and the organizational and societal effects of their turnover.

Spending Increases

Long-term care spending from public and private sources was approximately $183 billion in 2003 (U.S. Government Accountability Office [GAO], 2005a). Due to the expected doubling of demand for long-term care services, spending is projected to increase to $379 billion by the year 2050. This rise is partially fueled by the estimated 76 million aging baby boomers born between the years 1946 to 1964 and the increasing number of disabled elderly who cannot perform basic activities of daily living (GAO, 2005a).

Population Increases

In 2000, individuals aged 65 or older numbered 35.1 million, accounting for 12.4% of the U.S. population. By 2020, the percentage of individuals aged 65 or older is projected to increase to 16.3%, equaling one in six Americans. This will result in an increase of 20 million more elderly than in the year 2000. By 2040, the number of persons aged 85 years and older is projected to increase more than 250% from 4.3 million in 2000 to 15.4 million (GAO, 2005a).

With the projected population increases and the increased demand for long-term care services, staff requirements in nursing and residential care facilities are expected to dramatically increase. This is in part fueled by financial pressures on hospitals to discharge patients as soon as possible and modern medical technology. As technology saves and extends more lives, it increases the need for long-term care (Bureau of Labor Statistics [BLS], 2006).

Industry Segmentation

The industry is divided into several different sectors. Several of the more common forms of long-term care are (a) institutional care in nursing homes or assisted living facilities, (b) in-home services where patients are cared for in their homes, (c) adult daycare, and (d) unpaid care from children of the elderly (GAO, 2005b; Matthews, 2004). The U.S. Department of Veterans Affairs (VA) also provides long-term care for elderly veterans and veterans requiring assistance with activities of daily living. The department utilizes 134 department-owned and operated long-term care facilities. The VA also utilizes over 2,000 contracted privately-owned long-term care facilities and 116 state veterans' long-term care facilities located in 44 states and Puerto Rico (GAO, 2006a, 2006b).

Nursing Assistant Turnover Rates

Currently, the shortage of NAs is at critical levels. Nursing assistant turnover rates ranging from 45% to well over 100% in long-term care facilities have been reported as far back as 1974, and the shortage of nursing assistants has not diminished (Almquist & Bates, 1980; American Health Care Association [AHCA], 2002; Anderson, Issel, & McDaniel, 1997; Bowers & Becker, 1992; Bowers et al., 2003; Brennan & Moos, 1990; Caudill & Patrick, 1989; Cohen-Mansfield, 1997; Decker, Gruhn, Matthews-Martin, Dollard, Tucker, & Bizette, 2003; Donoghue & Castle, 2006; Harrington, 1990; Helmer, Olson, & Heim, 1993; McDonald, 1994; Schwartz, 1974; U.S. Department of Health and Human Services [HHS], 2001). Mion, (2003) noted that "the rapid turnover of nurse aides is due to low wages, difficult working conditions, and fewer benefits compared to other service entry workers" (p.5). Additionally contributing to turnover is

the fact that NAs have the highest rate of workplace injury, even more than construction workers (GAO, 2001).

Nursing Assistant Duties

The official duties of NAs and patient care assistants are to (a) perform routine tasks under the supervision of nursing and medical staff; (b) answer patients' call lights, deliver messages, serve meals, make beds, help patients eat, dress, and bathe; (c) provide patient skin care; (d) take patients' temperature, pulse rate, respiration rate, and blood pressure; and (e) help patients get into and out of bed and walk (BLS, 2006). One of the important functions of NAs is to observe residents' physical and mental condition and report their conditions to the medical staff. Because some residents may stay in a long-term care facility for months or even years, NAs develop ongoing relationships with patients and interact with them in a positive, caring way. Most full-time NAs work about 40 hours a week. However, because many patients need care 24 hours a day, some NAs work evenings, nights, weekends, and holidays (BLS, 2006).

Nursing assistants are often assigned unpleasant duties, such as emptying bedpans and changing soiled bed linens. The patients they care for may be disoriented, irritable, or uncooperative. Psychiatric aides must be prepared to care for patients whose illness may cause violent behavior. While their work can be emotionally demanding, many NAs gain satisfaction from assisting those in need (BLS, 2006).

Nursing Assistant Training

Long-term care facilities often hire inexperienced workers, who must complete a minimum of 75 hours of mandatory training and pass a competency evaluation as part of a state-approved training program within 4 months of their employment as NAs.

Nursing assistants who complete the program are known as certified nursing assistants (CNAs) and are placed on a required state registry of NAs (BLS, 2006). The state registry also makes note of NAs who are found to be responsible for abuse, neglect, or theft of a resident's property. Such action effectively bans NAs from further employment in the long-term care industry (GAO, 2005b).

Nursing Assistant Turnover Implications

The NA provides the majority of the direct care to residents of long-term care facilities. Therefore, job turnover impacts residents in a dramatic manner. When the continuity of care in long-term care facilities is not maintained due to constant turnover, residents are often ill-equipped to deal with the resultant staff changes (McDonald, 1994). In the face of high turnover, new staff members are less aware of the needs and preferences residents require, thereby negatively affecting the residents' health care (Yeatts & Seward, 2000).

Moreover, the initial loss of an NA generally impacts efficiency. Quality slips as other nursing assistants attempt to cover for the missing coworker, or schedules are disrupted and supervisors have to determine how best to fill the void in the schedule (Caudill & Patrick, 1989; Cohen-Mansfield, 1997; Halbour, 1982; Helmer et al., 1993; Lekan-Rutledge, Palmer, & Belyea, 1998; Schwartz, 1974; Yeatts & Seward, 2000;). Furthermore, due to short staffing, workers in nursing homes may be responsible for too many residents and this may lead to poorer quality of care and/or unsafe care for the residents (U. S. Department of Health and Human Services, 2001).

Need for the Study

There is a need to study nursing assistants' (NA) intent to quit in state-owned veterans long-term care facilities. The need is supported by a recent doubling of the number of elderly veterans requiring long-term care (GAO, 2004 a) and VA methodology that is shifting long-term care workload to state-owned facilities. Further, there is both a defined need for and a lack of research specifically addressing NA turnover issues in state-owned veterans long-term care facilities. Finally, the researcher's personal experience in the veterans long-term care industry provides an observed need for this study.

Increased Veteran Population

Due to the dramatic increase in the veteran population, demand for veteran long-term care has occurred and the demand for staff has increased. The long-term care needs of elderly veterans (85 years and older) grew from approximately 387,000 in 1998 to about 764,000 in 2003, and the numbers are expected to rise to 1.3 million over the next decade (GAO, 2004a). The GAO (2006b), reported that 38% of the veteran population is over the age of 65, compared with 12% of the general population.

VA Methodology Shift

The VA is currently shifting much of its care to state-owned long-term care facilities due to significant cost reductions. Since fiscal year 1998, the VA's use of long-term care facilities has changed in a dramatic manner. The VA's overall patient workload in long-term care facilities increased to an average of 34,375 patients per day for fiscal year 2005 (GAO, 2006b), with state long-term care facilities accounting for over half the VA patient workload. The workload in state-owned long-term care facilities

has increased from 43% to almost 52%, while the workload in VA-operated long-term care facilities has decreased (GAO, 2004b, 2006a).

The VA spent approximately $2.3 billion to provide or pay for long-term care facilities in fiscal 2003. Approximately $1.7 billion went to VA-owned and operated long-term care facilities, $352 million went to state-owned long-term care facilities, and $272 million went to community homes (GAO, 2004b). On first glance, $352 million appears to be rather small in comparison to the $1.7 billion that went to VA-operated long-term care facilities considering that state owned long-term care facilities accounted for over half the patient workload. The explanation for the large increase in use of state-owned veterans long-term care facilities is the amount of money spent by the VA, which pays an average of one third the cost of daily care for veterans (approximately $59.36 per day per veteran) in state-owned veterans long-term care facilities compared to the full cost in other settings.

Existing Research

Cotton and Tuttle (1986) conducted a meta-analysis on 120 previous turnover studies spanning years 1979 to mid-1984 and concluded that research is needed on employee turnover that includes the industry, but more importantly the employees, the population, and the related variables associated with the industry. Harrington and Swan (2003) noted that high turnover rates lowered staffing levels and that nursing facilities needed to place emphasis on the retention of staff. Furthermore, by focusing their efforts on retention and staff by addressing factors related to turnover and wages, stability of their workforce may result. Cohen-Mansfield (1997) emphasized that “before

any attempt is made to reduce high turnover, administration must be aware of areas of concern to nursing staff" (p. 64).

Lack of Research

The researcher found no previous studies using primary or secondary data that studied state-owned veterans long-term care facilities NA intention to quit and the six independent variables chosen for this study. Therefore, this study utilized primary data to determine NA intention to quit.

Observed Need

The researcher is a long-term care ombudsman volunteer (advocate for residents of nursing homes) with over 3 years of experience (see Appendix A). The researcher has personally witnessed staff having difficulties with inadequate equipment; negative interactions between residents, family members, and staff; and inadequate training results. The variables chosen for this study were based on previous literature that directly linked each variable to turnover and were confirmed by the researcher's previous personal observations. This researcher has also handled resident complaints as an ombudsman volunteer regarding lack of NAs due to high turnover rates.

Theoretical Framework

Several models exist to determine the turnover intentions of workers. One such example is the decision to participate model by March and Simon (1958). The March and Simon theory has two distinct but not completely independent components: (a) the *perceived desirability of leaving the organization* and (b) the *perceived ease of movement from the organization* (p. 93).

The March and Simon (1958) model is considered one of the earliest and most influential integrative models of employee turnover and is perhaps the first one to attempt a systematic integration of the economic-labor market and individual behavior (Mobley, 1982). Mobley noted that “the March and Simon model has contributed to the study of turnover by focusing attention on the need to assess both economic-labor market and behavioral variables in studying the employee turnover process” (p. 120).

Following the March and Simon (1958) decision to participate model, Price (1977) presented the model of determinants and intervening variables. The Price model mentions two variables (satisfaction and opportunity). The variable “opportunity” intervenes between the determinants and turnover while the variable “satisfaction” precedes the variable “opportunity.” A major hypothesis of the model is that “dissatisfaction results in turnover only when opportunity is relatively high” (p. 83). Mobley (1982) noted that a criticism of the Price model is its “lack of specificity regarding how individuals perceive and evaluate the determinants and opportunity” (p. 121).

Intention to quit was not identified in the earlier models, but in 1977, Mobley developed the Mobley intermediate linkages model, whose major hypothesis was that “intention to quit is the variable which immediately proceeds turnover” (Mobley, 1982, p. 122). This model suggests that dissatisfaction elicits thoughts of quitting, intentions to quit, and turnover. It focuses on the role of satisfaction as the immediate precursor of turnover.

Following the Mobley intermediate linkages model, came the Mobley, Griffeth, Hand, and Meglino (1982) turnover model, which incorporated elements from the March

and Simon (1958) decision to participate model, Price's (1977) model of determinants and intervening variables, and Mobley's intermediate linkages model and became known as the expanded Mobley et al. model. This model illustrated the multiple organizational, environmental, and individual variables associated with the turnover process (Mobley, 1982).

According to the expanded Mobley et al. model, satisfaction is highly individualized, is dependent on individual differences in values, and is a function of what an employee perceives. Mobley (1982) noted that "since there are multiple determinants of turnover, multiple strategies for effectively diagnosing and managing turnover are required" (p. 132).

Alexander, Lichtensein, Oh, and Ullman (1998), drawing on the previous work of Mobley, Price, and others, developed the causal model of turnover among nursing personnel in long-term psychiatric settings. The purpose of their study was to develop and test their model and to identify aspects of work that predicted most nursing personnel's intention to leave. This model differs from previous models in that it attempts to identify elements of work and the workplace in which turnover occurs among different types of nursing staff (Alexander et al., 1998).

The causal model of turnover emphasized the importance of job satisfaction dimensions that influence the intention to quit of nursing personnel (Alexander et al., 1998). Furthermore, the model is based on the assumption that "individual attitudes and experiential orientations will interact with situational factors to shape work attitudes and behaviors" (p. 416). A key implication of the Alexander et al. causal model of turnover

theory is that “different categories of nursing personnel are likely to be more or less affected by different aspects of the job and the workplace” (p. 417).

This study utilized a modified version of the Alexander et al. (1998) causal model of turnover as the basis for identifying factors that influence employee intention to quit. The primary interest of the Alexander et al. study was in “differentiating the work orientation and attitudes of RNs, who tend to hold leadership positions, from those of other nursing staff, who often are more directly involved in the care of patients” (p. 420). Since the present study studied only the NA workforce, several variables were removed from the model and were replaced with determinants of turnover more suited to NAs.

The Alexander et al. (1998) causal model of turnover utilizes nine variables to determine the intention to quit of nursing personnel. These variables are illustrated in Figure 1.

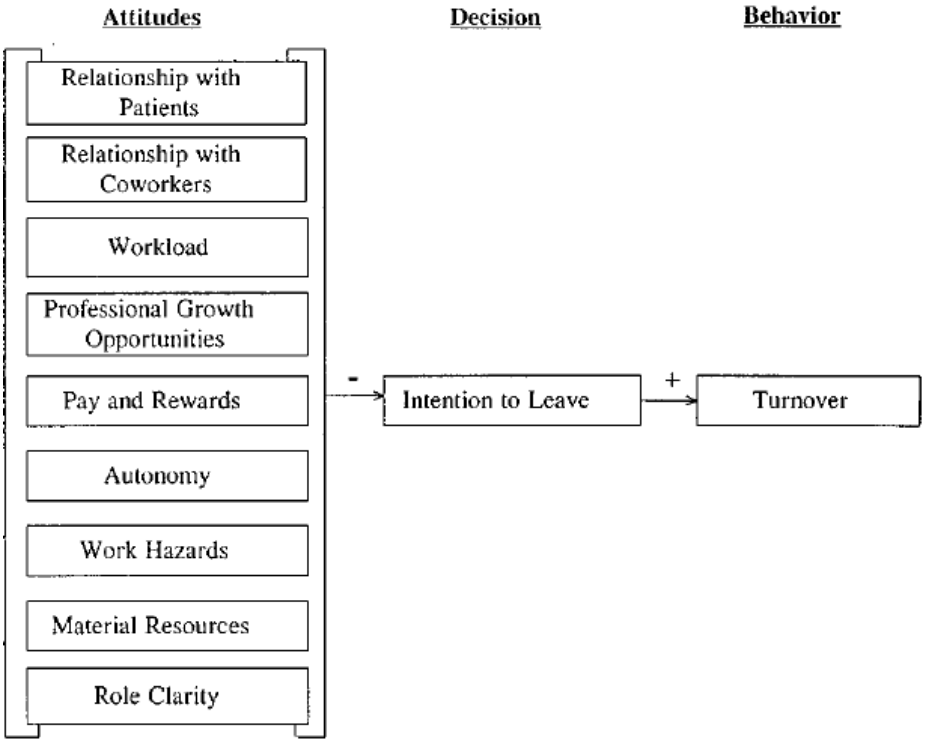

Figure 1. Theoretical model of turnover and intention to quit among psychiatric personnel.

This present study utilized six variables that have been directly linked through previous studies to NA turnover (see Figure 2). This study utilized the same conceptualization of the model but removed the variables not used in this study and replaced them with variables more suited to NAs.

Figure 2 illustrates the revised model with the variables tested in this study. Further explanations of the variables used in this study are included in detail in chapter 2.

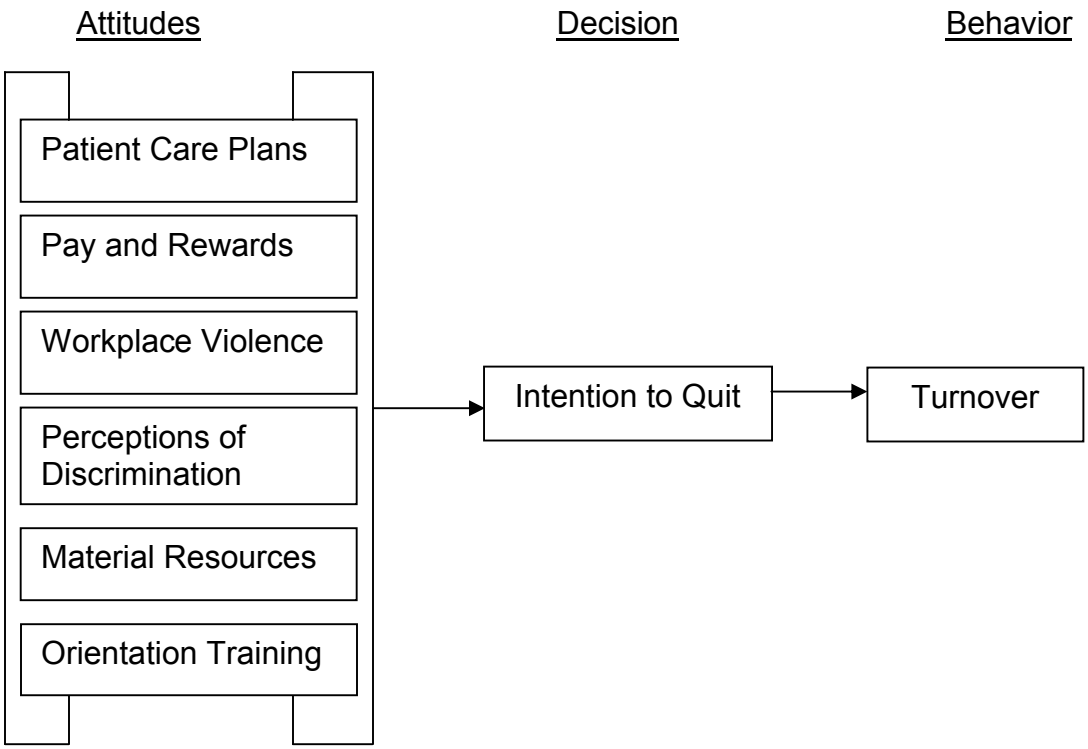

Figure 2. Revised version of turnover model.

Purpose of the Study

The purpose of this study was to examine a select set of organizational variables and determine their relationship to nursing assistants' intentions to quit in state-owned veterans' long-term care facilities located across the United States.

Research Hypothesis

One research hypothesis was formulated for this study:

H_o1: There is no statistically significant relationship between NAs' intention to quit and patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training.

$$Y = \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6$$

Delimitations: Within Researcher's Control

This study was limited to the entire population of patient care assistants (PCA) (approx. 800) in the Oklahoma State Veterans Administration seven long-term care facilities. No civilian facilities were utilized in the study.

The seven Oklahoma state owned long-term care facilities administered by the Oklahoma State Veterans Administration are Ardmore – 79 authorized PCAs; Claremore – 160 authorized PCAs; Clinton – 68 authorized PCAs; Lawton – 130 authorized PCAs; Norman – 135 authorized PCAs; Sulphur – 62 authorized PCAs; and Talihina – 88 authorized PCAs.

The centers are not-for-profit entities, and the participants in this study varied in age, gender, and race. The participants included NAs working at Oklahoma's state-owned Veterans Administration facilities. The residents of the facilities have all had military experience either through full 20-year or more careers resulting in retirement, draft service, or service in wars and campaigns.

Limitations: Outside Researcher's Control

Management approval was obtained to attend the staff meetings (all three shifts) of all seven facilities and to distribute the surveys. Prior studies have attempted to gather results through the mail or chance meetings at the end of each shift, resulting in less than optimal results and small sample sizes. Because of approval to attend staff meetings, the entire PCA workforce of the VA in the state of Oklahoma could be surveyed.

Definition of Terms

Patient care assistant (PCA): Positions in this job family are assigned responsibilities for providing direct and indirect non-Professional nursing care or outreach services in a clinic, hospital, institution, or home setting under nursing or medical supervision. This includes performing duties such as taking vital signs, obtaining lab specimens, charting, escorting patients, assisting with activities of daily living, and ordering and receiving supplies (State of Oklahoma. Office of Personnel Management, 2006).

Nursing assistant (NA): synonymous with patient care assistant.

Turnover : separation of an employee from an establishment for voluntary, involuntary, or other reasons (U.S. Department of Labor, 2006).

Summary

Chapter 1 provided a description of the problem and the significance of the study. The theoretical framework was identified and explained as well as the purpose of the study and the research hypothesis. Chapter 2 contains a review of the existing literature in the areas of past staff turnover studies and the dependent and independent variables to be studied. Chapter 3 describes the process and steps that were taken in the study. It presents an overview of the proposed population, sample, instrumentation, data collection, and data analysis procedures.

CHAPTER 2

LITERATURE REVIEW

The literature review begins by focusing on this study's dependent variable, intent to quit and linking it to nursing assistant turnover. Next, past studies that have examined the study's independent variables are reviewed. The six independent variables to be studied are as follows: patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training.

Intent to Quit

Intent to quit was not identified in earlier turnover models as a predictor of turnover, but in 1977, W. H. Mobley developed the Mobley intermediate linkages model, whose major hypothesis was that "intention to quit is the variable which immediately proceeds turnover" (Mobley, 1982, p. 122). This model suggests that dissatisfaction elicits thoughts of quitting, intentions to quit, and turnover. The model focused on the role of satisfaction as the immediate precursor of turnover.

Hospital employee turnover was studied by Mobley, Horner, and Hollingsworth (1978) using a multiple regression methodology. They determined that the variable "intent to quit" exhibited the only significant coefficient (.49) with actual turnover, concluding that among the variables studied, intent to quit was the immediate precursor of actual withdrawal.

Alexander et al. (1998) conducted a study funded by the Mental Health Strategic Health Group of the Veterans Health Administration Headquarters, which directly linked intent to quit to turnover. Through the use of structural equation modeling and nine

dimensions of job satisfaction, the study found that turnover was a direct function of intention to quit. The study reported that the higher the level of satisfaction on the nine dimensions used in the study, the less likely nursing personnel intended to or actually quit. The study concluded that “intention to quit was the most important predictor of actually leaving the job” (p. 423).

Patient Care Plans

Almquist and Bates (1980) reported that the inability to view patient care plans was perceived by NAs as a difficulty in accomplishing their job. Their study of NAs in Dade County, Florida, nursing homes reported the NAs’ inability to view their patient care plans as a difficulty in accomplishing their job. Caudill and Patrick (1989) utilized Maslow’s hierarchy of needs as a framework and reported NA turnover rates as high as 117% in the state of Washington. Their study concluded that NAs should be involved in patient care conferences.

Banaszak-Holl and Hines (1996) surveyed nursing homes in 10 states and reported an average of 32% turnover rates within 6 months. Their study provided evidence that nursing homes that involved nursing assistants in care planning can dramatically reduce turnover rates, at times as much as 50%. The results of the study conducted by Gates, Fitzwater, and Meyer (1999) suggested that a lack of information typically found in a patient care plan regarding the residents and their family dynamics could increase NA turnover. The study mentioned that before caring for a resident, NAs often have no information regarding the resident’s condition, social history, or information regarding family dynamics.

Feldt and Ryden (1992) also suggested that a lack of information typically found in a patient care plan could increase NA turnover. The study noted that “NAs need to have a clear sense of what goals are to be achieved for each resident and appropriate intervention for each goal. Ideally, this information is found in the nursing care plan” (p. 7). The U. S. Department of Health and Human Services (2001) study on vacancies and turnover rates among paraprofessionals reported NA turnover rates ranging from 45% to 105%. The study reported that “homes in which nurse supervisors accepted nursing assistants’ advice or simply discussed care plans with the aides reported turnover rates that were one-third lower than those without these practices” (p.4).

The University of California, San Francisco, Center for California Health Workforce Studies (2006) conducted a study on the aging U.S. population, the health care workforce, and the factors affecting the need for geriatric care workers. The study reported turnover rates of 71% in nursing homes and noted that the demand for long-term care services is not decreasing. The study reported that programs that emphasized participation in care planning were shown to be effective in reducing NA turnover.

Pay and Rewards

In an attempt to determine what the VA could do to mitigate the nurse workforce shortage, the VA performed a study in 2001 which addressed issues surrounding registered nurses, practical nurses, and NAs. The report mentioned issues with the out-of-date benefit packages as well as personnel or administrative practices and recommended increased financial incentives (U.S. Department of Veterans’ Affairs and Veterans’ Health Administration, 2001). Mion (2003) concluded that the rapid turnover

of NAs is due to low wages, harsh working conditions, and fewer benefits compared to other service entry jobs.

Harrington (1990) observed that low wages and benefits directly contribute to high turnover in nursing homes and that this directly impacts staffing levels and resident quality of care. Furthermore, providing equitable wages and benefits to its employees should attract high-quality personnel. The U. S. Department of Health and Human Services (2001) conducted a study on vacancies and turnover rates among paraprofessionals and found that increased salaries and improved benefits helped reduce turnover rates by up to 44%.

According Harrington and Swan (2003) even small increases in pay appeared to increase NA staffing levels, suggesting that the NA labor market is wage sensitive. Of the multiple variables that Levin, Hewitt, Misner, and Reynolds (2003) studied, the low pay of NAs was linked to turnover. Caudill and Patrick (1989) noted that “the higher the salary, the longer the subjects had been in their current job” (p. 27). Donoghue and Castle (2006) observed that starting salaries for nursing assistants are “likely to influence the level of voluntary turnover” (p. 469).

The Oklahoma Governor’s Council on Workforce and Economic Development report on health care reported extremely high NA turnover rates (Oklahoma Department of Commerce, 2006). The report noted that salaries for nurse’s aides are extremely low and that “workers sometimes find better paying jobs in other employment settings” (p. 23). The University of California, San Francisco; Center for California Health Workforce Studies (2006) study on the aging U.S. population, the health care workforce, and the

factors affecting the need for geriatric care workers reported that the turnover rates of nursing assistants have been linked to low wages and benefits.

Workplace Violence

In discussing assault issues in long-term care facilities, the retort most frequently used is that residents are cognitively impaired, have dementia, and do not know what they are doing. Research has been conducted which validates this assertion, which places the most assaults on staff by residents and those residents who are cognitively impaired or have dementia (Malone, Thompson, & Goodwin, 1993). However, follow-on research suggests that residents who are cognitively intact and their families also threaten or assault workers (Gates et al., 1999; Malone et al., 1993).

Levin et al. (2003) conducted a study examining multiple variables that contribute to workplace violence. Their study suggested that assaults impact the overall environment of the long-term facility through decreased quality resident care, absenteeism, and attrition. The authors observed that, over time because of workplace assaults NAs would withdraw from providing outstanding care and be unwilling to “go the extra mile” (p. 33). The Levin et al. (2003) study also concluded that inadequate staffing levels contribute to workplace violence and that high turnover directly impacts staffing levels.

McGuire, Dougherty, and Atkinson (2006) suggested that sexual harassment has a negative effect on the workplace environment and affects nurse retention. Sexual harassment by the patients to the staff negatively affects the performance of the nurses. Instead of becoming caring to the patient, they increasingly distance themselves, which in turn results in complaints from the patient that they are not being taken care of.

According to McGuire et al., “Nurses cannot both respond as victims of sexual harassment and fully enact their care giving roles” (p 441).

The Alexander et al. (1998) study mentioned that “satisfaction with coworker relations and job hazards also exercised a direct effect on turnover” (p.421). The study noted that if nursing personnel perceive that they are subject to physical hazards in the performance of their jobs, they may leave their job without any prior intention to do so.

Perceptions of Discrimination

Levin et al. (2003) noted that participants in their study recalled verbal abuse and racial slurs from the residents and family members, indicating that this form of abuse is not easily forgotten, suggesting turnover implications. Gates et al. (1999), noted that the subjects of their study indicated that resident-to-caregiver racial slurs were commonplace.

Material Resources

Brennan and Moos (1990) found that turnover is correlated at .39 with physical design features of the facilities. “Turnover is greater where there are fewer physical amenities, social-recreational aids, and prosthetic aids and less environmental diversity” (p. 25).

Orientation Training

Bowers and Becker (1992) reported turnover rates of 120% to 145% annually. Their research of nurse’s aide orientation programs utilized three nursing homes in the Midwest and found that more than 90% of new NAs resigned within the first 3 weeks. Their study concluded that NA orientation programs could reduce nurse’s aide turnover if they were more effective and incorporated more information on how to organize work.

In an attempt to decrease the PCA turnover rate, the state of Oklahoma recently passed SB 1318 (2006), which authorizes the Oklahoma Department of Veterans Affairs to provide employer-based nurse's aid training for purposes of certification by the State Department of Health (Oklahoma State Senate Bill 1318, 2006). Previously, this training was accomplished off-site. The reason behind this bill is to have the trainees train in the environment they will actually work in, thus reducing the amount of new nurse's aide turnover.

Summary

This chapter provided a review of literature regarding nursing assistant turnover rates, followed by literature in the areas of staff intentions to quit and the relation to turnover. The review was followed by a brief discussion of the independent variables chosen for this study. Chapter 3 describes the process and steps taken in the study. It presents an overview of the population, sample, instrumentation, data collection, and data analysis procedures.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

This chapter describes the methodology and procedures utilized to assess the relationship between the six independent variables and the dependent variable “intent-to-quit” for nursing assistants in state-owned veterans long-term care facilities. This study used current employees in the state of Oklahoma. The chapter outlines the research design, research question, population, sample, instrumentation, data collection procedures, and analysis techniques utilized to conduct the study.

Research Design

This study is a correlational design, using multiple regression analysis to assess the relationship between the dependent variable “intent to quit" and the following independent variables: patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training.

Population

The target population for this study is NAs working in the 116 state veterans’ homes in 44 states and Puerto Rico (GAO, 2006a, 2006b). The GAO (2006a) noted, “The Secretary of the Department of Veterans Affairs indicated that patient populations served in state veterans’ nursing homes are relatively similar nationwide and that patients receive predominantly long-stay-nursing home care” (p. 2). Thus, the ability to generalize this study’s finding to all state veterans nursing homes has been established.

Sample

The state of Oklahoma, where this study was conducted and where this study's sample of NAs was drawn from, operates a total of seven state-owned veterans long-term care facilities. Lawton, Oklahoma, acquired the latest facility in November 2003; it is a 200-resident occupancy facility. Oklahoma currently has the most beds in the nation, with 1,439 available to veterans (GAO, 2006a).

A power analysis was conducted to determine the minimum sample size needed for the study. Achieving a power estimate equal to .80 for the proposed statistical tests for this study requires a sample size of 96. Selection of .80 as the power level for this study adheres to Cohen's (1988) assertion that "when the investigator has no other basis for setting the desired power level, the value .80 be used" (p. 56).

Selection of the effect size for this study also adheres to Cohen's (1988) definitions of effect sizes; this study used a medium effect size of .15. The power estimate is based on an alpha level of .05, a medium effect (f^2 = .15), six independent variables (u = 6), degrees of freedom of the numerator (v = 120), and selection of .80 as the power level resulting in a noncentrality parameter of 14.3 (λ= 14.3) (Cohen, 1988, p. 452). Using the formula when the effect size is expressed as f^2, the study requires a minimum of 96 participants (Cohen, 1988, p. 445).

$$N = \frac{\lambda}{f^2}$$

The study used the seven not-for-profit Oklahoma State Veterans Administration-owned and administered long-term care facilities as the sample. The facilities are Ardmore – 79 authorized PCAs; Claremore – 160 authorized PCAs; Clinton – 68

authorized PCAs; Lawton – 130 authorized PCAs; Norman – 135 authorized PCAs; Sulphur – 62 authorized PCAs; and (7) Talihina – 88 authorized PCAs.

Instrumentation

Each variable utilized questionnaires or subscales chosen from previously administered instruments and questions added by the researcher. The majority of the instruments are located in the U.S. Department of Health and Human Services and U.S. Department of Labor (2005) guide "Measuring long-term care work: A guide to selected instruments to examine direct care worker experiences and outcomes." To operationalize each variable, participants were administered an instrument or subscale of an instrument.

Intent to Quit

To operationalize the dependent variable "intent to quit," (questions 6-11 on this current study's questionnaire) a modified subscale from Yeatts and Cready (2006) Concepts for Nurse Aides: Phase 2 (alpha .77) (questions 32, 58, & 79), two questions (1 and 2) from the Michigan organizational assessment questionnaire (MOAQ) (alpha .83) and 1 question from the General Job Satisfaction (JDS) survey,(question 5), (alpha .74-.80) survey instrument were used. For the purposes of this study, all the question scales have been modified to allow six choices (*agree very much*, *agree moderately*, *agree slightly*, *disagree slightly*, *disagree moderately*, and *disagree very much*). One question was further modified (Yeatts, question 1), the term *nurse's aide* was changed to *patient care assistant* to better identify with the targeted audience. The scores from the scale were summed and then averaged. Higher mean scores indicate higher perceptions of intention to quit.

Pay and Rewards

To operationalize the independent variable pay and rewards (questions 12-20 on this current study's questionnaire), two modified subscales from Spector's (1985) Job Satisfaction Survey were utilized. The Pay subscale has four items, and the Contingency Reward scale has four items. Scores from the two scales have respectively yielded coefficient alphas (internal consistency reliability) of .75 and .76 (Spector, 1985). The subscales are scaled with six possible choices (*agree very much*, *agree moderately*, *agree slightly*, *disagree slightly*, *disagree moderately*, and *disagree very much*). Five questions were further modified with minor sentence structure changes. Question 20 was added by the researcher to identify the frequency of pay periods for the NAs. Several of the facilities only pay monthly, and researcher discussions with staff suggested pay frequency as a possible contributor to NA turnover. The scores from the scale (questions 12-20) were summed and then averaged. Higher mean scores indicate higher perceptions of inadequate pay and rewards.

Perceptions of Discrimination

To operationalize the independent variable perceptions of discrimination (questions 21-28 on this current study's questionnaire), a modified version of the Margeret Blenkner Research Institute's (MBRI) (2001) Perceptions of Discrimination questionnaire was utilized. No published body of work was found that reported the reliability coefficient of self-responses to the current version of this instrument. The original version did not use a Likert-type scale and only used two questions. For the purpose of this study, the scale has been modified to allow six choices. The two questions utilized are scaled with six possible choices (*agree very much*, *agree*

moderately, *agree slightly*, *disagree slightly*, *disagree moderately*, and *disagree very much*). The researcher added 6 questions (questions 22, 23, 24, 26, 27, 28) to better encompass more areas of discrimination. For the purpose of this research, modifications to the instrument changed the acronym CNA to PCA to better identify with the targeted audience. The scale scores were summed and then averaged. Higher mean scores indicated higher perceptions of discrimination.

Patient Care Plans

To operationalize the independent variable patient care plans (questions 46-50 on this current study's questionnaire), modified subscales from Yeatts and Cready (2006) Concepts for Nurse Aides: Phase 2 survey instrument were used. One question from the Global Empowerment subscale (question 68) and 2 questions (questions 52 and 72) from the Competence subscale were utilized. Scores from the full implementation of the two scales have respectively yielded coefficient alphas (internal consistency reliability) of .82 and .65 (Yeatts & Cready, 2006). The researcher added 2 questions to expand the options relating to care plan meetings. The subscales were originally scaled with five possible choices (*strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*). For the purposes of this study, this has been modified to allow six choices (*agree very much*, *agree moderately*, *agree slightly*, *disagree slightly*, *disagree moderately*, and *disagree very much*). The scale scores were summed and then averaged. Lower mean scores indicate higher perceptions of lack of access to patient care plans.

Workplace violence

To operationalize the independent variable workplace violence (questions 41-45 on this current study's questionnaire), a modified version of the client behavioral problems subscale from the Benjamin and Matthias (2004) Stress/Burden Scale from the California Homecare Workers Outcomes survey instrument was utilized. Scores from the subscales have resulted in coefficient alphas ranging between .63 to .75 (Benjamin & Matthias, 2004). The client behavioral problems subscale consists of four questions and was originally scaled with three possible choices (*never*, *sometimes*, and *very often*). For the purposes of this study, this has been modified to five questions and to allow six choices (*agree very much*, *agree moderately*, *agree slightly*, *disagree slightly*, *disagree moderately*, and *disagree very much*). All five questions were further modified, with minor sentence structure changes. The scale scores were summed and then averaged. Higher mean scores indicate higher perceptions of workplace violence.

Material Resources

To operationalize the independent variable material resources (questions 29-32 on this current study's questionnaire), a modified subscale from Yeatts and Cready (2006) Concepts for Nurse Aides: Phase 2 survey instrument was utilized. Two questions from the Resources subscale (12, 66) were utilized. Scores from the full implementation of the scale have yielded a coefficient alpha (internal consistency reliability) of .63 (Yeatts & Cready, 2006). The Resources subscale consists of 2 questions and was originally scaled with five possible choices (*strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*). For the purposes of this study, this has been modified to allow six choices (*agree very much*, *agree moderately*, *agree slightly*,

disagree slightly, *disagree moderately*, and *disagree very much*). The researcher added two questions to allow responses for feeder tables, resident lift equipment, and ergonomic equipment. The scale scores were summed and then averaged. Higher mean scores indicate higher perceptions of lack of material resources.

Orientation Training

To operationalize the independent variable orientation training (questions 33-40 on this current study's questionnaire), a modified subscale from Yeatts and Cready (2006) Concepts for Nurse Aides: Phase 2 survey instrument was utilized. Two questions from the Training and Education subscale (questions 39 and 84) were used. Scores from the full implementation of the scale have yielded a coefficient alpha (internal consistency reliability) of .63 (Yeatts & Cready, 2006). The questions were originally scaled with five possible choices (*strongly agree*, *agree*, *neutral*, *disagree*, and *strongly disagree*). For the purposes of this study, this has been modified to allow six choices (*agree very much*, *agree moderately*, *agree slightly*, *disagree slightly*, *disagree moderately*, and *disagree very much*). One question was further modified to include aspects of job organization. The researcher added 6 questions to address specific skills necessary in the long-term care industry. The scale scores were summed and then averaged. Lower mean scores indicate higher perceptions of lack of orientation training.

Institutional Review Board

Following the guidelines provided by the University of North Texas (UNT) Institutional Review Board (IRB), the researcher developed a consent form to provide each study participant with information concerning study purpose, description, procedures, and confidentiality. This form (see Appendix D) described the research

subject's rights as well as the time required to complete the survey, the risks associated with participation, and contact information for the researcher and the committee chair. This document was submitted with the IRB application for review and approval (see Appendix C).

Data Collection Procedures

Approval had been granted by the Executive Director of the Oklahoma Department of Veterans Affairs to utilize the Oklahoma State-owned veterans long-term care facilities to conduct this study and to attend NA meetings to distribute the instrument (see Appendix B). Participants (currently employed at the facilities) were administered an instrument at their training sessions and/or employee meetings. Participant confidentiality was maintained by not requiring that any personal data be entered on the instrument. No record of who filled out the instrument will be maintained other than the survey data, the number on the survey, and the facility where the survey was administered. The researcher administered the survey and collected the results.

Data Analysis

The predictors of staff intention to quit (patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training) were determined through multiple regression model analysis. The data collected from individuals participating in the study were analyzed using the SPSS (Statistical Program for the Social Sciences) 14.0 for Windows Graduate Student Version.

The data were analyzed for reliability (Cronbach's alpha) and compared to the available reliability estimates of each subscale utilized in constructing the final

instrument. The data were also analyzed for missing data and normality (i.e., skewness and kurtosis). Imputation methods were utilized for any missing data. The data were further analyzed to determine the practical and statistical significance of the regression equations. The beta weights and structure coefficients were analyzed, according to Henson's (2002) guidelines, to determine the level to which each of the subjective gain scores predicts a change in the objective measurement difference. Descriptive statistics were also used to determine participant demographics.

Summary

This chapter discussed the research design, research question, population, sample, instrumentation, data collection procedures, and analysis techniques used to conduct the study. Chapter 4 presents the data and the findings based on those data, including sections on demographics, hypothesis analysis, and summary features.

CHAPTER 4

FINDINGS

Introduction

This study attempted to identify variables that contribute to or relate to the intentions to quit of nursing assistants working in state owned and operated veteran's long-term care facilities. Specifically, the purpose of this study was to examine a select set of organizational variables and determine their relationship to nursing assistants' intentions to quit in state-owned veterans long-term care facilities located across the United States. This study utilized multiple regression analysis to assess the relationship between the dependent variable, intent to quit and the following independent variables: patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training.

This chapter presents the data collected and the findings based on those data, including sections on participant demographics, instrument reliability, descriptive statistics, missing data, data assessment, and summary features. The total number of participants was 410. Data were gathered solely by the researcher, utilizing the instrument specified in chapter 3.

The instrument was divided into seven subscales: questions 6-11, intent to quit (ITQ) dependent variable; questions 12-20, pay and rewards (P&R) independent variable; questions 21-28, perceptions of discrimination (PD) independent variable; questions 29-32, material resources (MR) independent variable; questions 33-40, orientation training (OT) independent variable; questions 41-45, workplace violence

(WV) independent variable; and questions 46-50, patient care plan (PCP) independent variable.

SPSS 14.0 statistical analysis software and S-Plus 6.2 statistical software were used for all analyses. Data were manually entered from each of the 410 surveys completed. Data integrity was verified through random selection of surveys and comparison to data entered into SPSS.

Participants in the Study

This study utilized the seven Oklahoma state-owned long-term care facilities administered by the Oklahoma State Veterans administration; Ardmore, Claremore, Clinton, Lawton, Norman, Sulphur, and Talihina. The sample was drawn from this group of participants. No civilian facilities were utilized in the study.

Data Collection

The pilot study was conducted December 21, 2006, at the Lawton Oklahoma state-owned veterans long-term care facility. A total of 16 participants were assembled in the director's conference room where all participants were briefed on the purpose behind the study as well as the benefits the participants could expect to receive from the results of the study. The average time to complete the pilot study survey instrument was 15 minutes. Of the 16 participants, 15 completely filled out the survey.

Several areas discovered during the pilot study required modifications to the survey instrument and further IRB approval (see Appendix C). The word *equitable*, which is listed on the survey instrument in question 18, was not understood by one participant. This was further defined in the actual instrument as *fair/equitable*. Several participants asked why their education levels were being collected. This question was

removed and replaced with “how long have you worked at this facility?” Finally, the participants were asked whether they had any concerns about understanding the scaling of the responses. None of the participants expressed any concerns with the scaling of the instrument.

The actual data collection started on January 10, 2007, at the Lawton facility and was completed February 24, 2007, resulting in the collection of 410 surveys. Table 1 lists the potential participants and the actual participants. The Lawton facility was chosen simply because it was the closest to the researcher’s home. Total miles driven gathering data for this study were 1,891. Participants were asked to take the survey from all three shifts of each facility during on-site visit durations of 2 days.

Table 1

Potential and Actual Participants

Facility	Potential participants	Actual participants	Percentage
Ardmore	71	46	65%
Claremore	115	85	74%
Clinton	60	25	42%
Lawton	128	78	61%
Norman	120	85	71%
Sulphur	60	34	57%
Talihina	85	57	67%

Participant Demographics

Demographic information was collected from each participant in order to establish a baseline demographic for future studies. The sample consisted of 410 nursing assistants employed in state-owned veterans long-term care facilities located in the state of Oklahoma. Table 2 provides the demographic data for these nursing assistants. The age of the nursing assistants in this study was equally dispersed between 18 and over 52 years of age. Almost half of the nursing assistants were married, 19.8% were divorced, and 30.2% were single (never married). The ethnicity of the nursing assistants in this study was 57.6% Caucasian, with over 15% each representing African American and Native Americans. Length of employment varied from 0 to 6 months (20%) and over 6 years (26%).

Table 2

Demographic Characteristics of the Nursing Assistant Sample

Variable	Number	Percentage
Age		
18-24	82	20.0
25-31	63	15.4
32-38	59	14.4
39-45	78	19.1
46-52	69	16.8
Over 52	58	14.1
Gender		
Male	53	12.9
Female	356	86.8
Ethnicity		
African American	64	15.6
Asian	13	3.2
Caucasian	236	57.6
Hispanic	11	2.7
Native American	63	15.4
Other	21	5.1
Marital Status		
Single (never married)	124	30.2
Married	187	45.6
Divorced	81	19.8
Widowed	14	3.4
Length of Employment		
0-6 months	85	20.7
6-12 months	66	16.1
1-2 years	63	15.4
2-4 years	63	15.4
4-6 years	25	6.1
Over 6 years	107	26.2

Instrument Reliability

Cronbach's alpha, a measure of internal consistency (Thompson, 2003), was calculated for each of the seven subscales utilized in the instrument. Alpha coefficients ranged from 0 to 1 and describe the reliability of data underlying the PCA perceptions of intent to quit scores. The higher the alpha score, the more reliable the scores are. Table 3 contains the item alignment and the results of the Cronbach's alpha calculations for each subscale for both the pilot study and the actual study. An acceptable cut-off point for predictive studies is that alpha should be at least .70 or higher to retain a set of items (Nunnally, 1978).

Table 3

Instrument Reliability Coefficients

		Pilot study		Study	
Subscale	Items assigned	α	n	α	n
Intent to quit	6,7,8,9,10,11	.86	15	.86	406
Pay and Rewards	12,13,14,15,16,17,18,19,20	.91	15	.83	406
Perceptions of Discrimination	21,22,23,24,25,26,27,28	.89	15	.86	406
Material Resources	29,30,31,32	.92	15	.89	406
Orientation Training	33,34,35,36,37,38,39,40	.95	15	.90	405
Workplace Violence	41,42,43,44,45	.76	15	.81	406
Patient Care Plans	46,47,48,49,50	.69	15	.70	403

Missing Data

The data were surveyed to determine whether there were any missing data. Only questions that were operationalized utilizing the study subscales were analyzed for missing data; demographic questions (1-5), were not imputed. The missing data (Table 4) was imputed (estimating) with scores that are missing. Cohen, Cohen, West, and Aiken (2003) noted that "in survey research, for example, some subjects may refuse or simply fail to respond to some items while responding to others" (p. 432). According to Cohen et al., "In longitudinal or multiple informant studies, variables missing at one time point or from one informant may be approximated by other available data" (p. 432).

Table 4

Missing Data Analysis

Total questions (6-50)	Total respondents	Total possible answers	Total answered	Missing responses	Completion %
45	410	18450	18380	64	99.7

This study utilized the mean substitution method. This method substitutes the mean value for each of the variables reflecting group membership (Cohen et al., 2003). Selection of the mean substitution method to code cases with absent at the mean has historically been used most frequently (Cohen et al. 2003) and as Cohen et al. noted, "If good indicators of the missing values are not available, it will probably do no harm to use plugged means" (p. 450). Initial analysis of the data indicates there was a 1% or less missing data for each question. In fact, each question achieved a 99% or greater completion rate.

Four surveys were removed due to excessive missing values, resulting in a total of 406 complete surveys utilized in the data analysis. These four surveys accounted for 38 missing responses (over 50% of the missing data). The remainder of the missing values was imputed using the mean of the subscale for the participant.

Descriptive Statistics

Table 5 lists the descriptive statistics for each subscale with imputed values. The mean, standard deviation, skewness, and kurtosis are listed.

Table 5

Descriptive Statistics

Subscale	N statistic	Mean statistic	Std. statistic	Skewness statistic	Kurtosis statistic
Intent to quit	406	3.0678	1.37121	.533	-.784
Pay and Rewards	406	3.6709	1.12893	-.157	-.325
Perceptions of Discrimination	406	2.3239	1.11509	.828	.126
Material Resources	406	2.7792	1.58085	.484	-1.022
Orientation Training	406	5.0874	.97502	-1.662	3.253
Workplace Violence	406	3.8729	1.45890	-.229	-.952
Patient Care Plans	406	3.3590	1.20312	-.002	-.696

Note. n = 406.

Homoscedasticity Analyses

A standard regression was run to obtain a scatterplot of residuals and predicted values. The resulting scatterplot (see Figure 3) indicates grouped data, demonstrating homogeneity of variance (Tabachanick &Fidell, 1996).

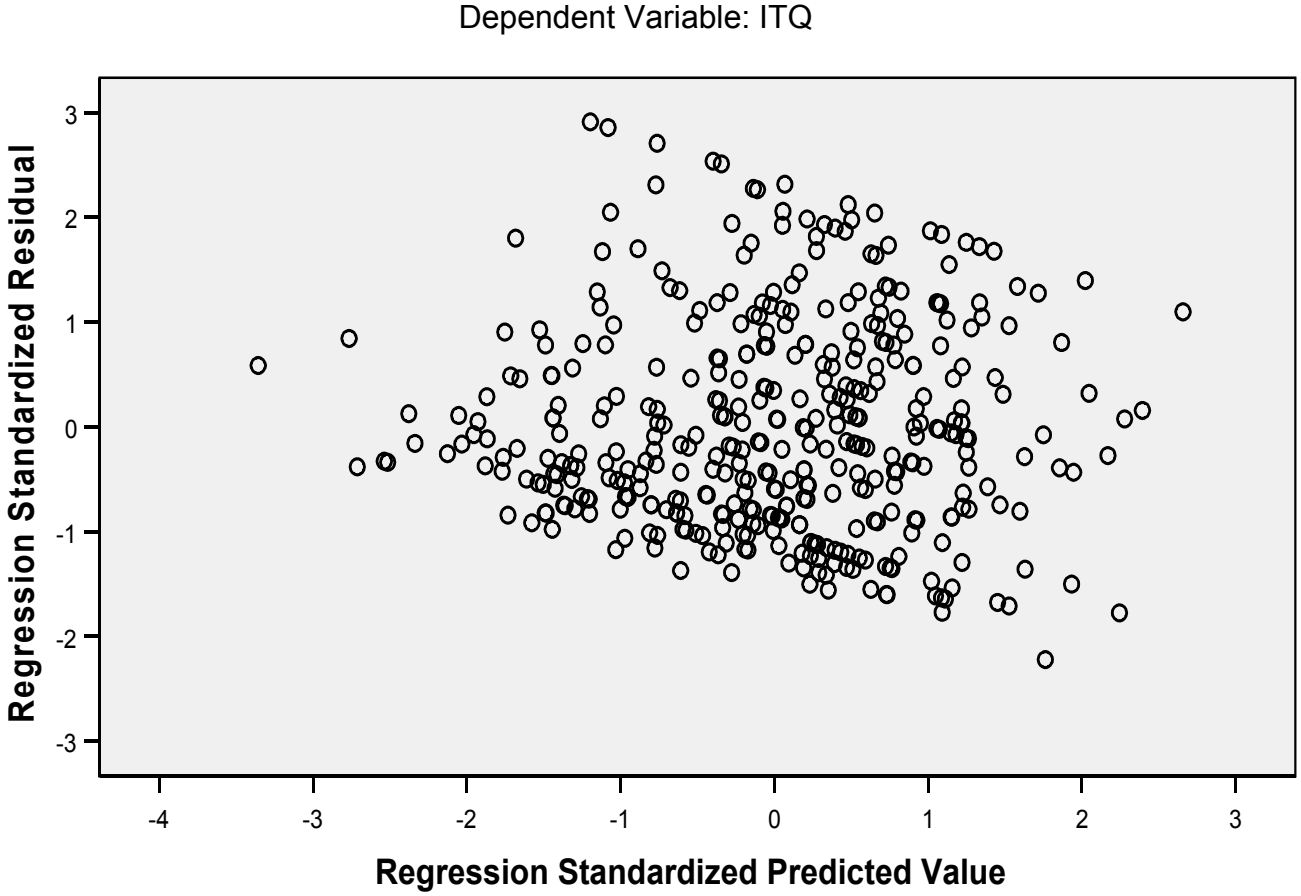

Figure 3. Homogeneity scatterplot.

Data Analysis

Data Screening

Multiple one-way ANOVAs utilizing each variable and the facility coding were accomplished to determine whether there were any statistically significant and practical differences between the seven data collection sites and each subscale. Table 6 reflects the *p* values, eta, and omega scores.

Table 6

Subscale ANOVA Analysis

Variable	*F*	*p*	n^2	ω^2
ITQ	1.313	.250	.019	.007
P&R	2.553	.019	.037	.025
PD	7.218	.000	.098	.082
MR	14.885	.000	.183	.172
OT	.381	.891	.005	-.007
WV	2.635	.016	.038	.026
PCP	5.144	.000	.072	.060

Note. df between, within 6, 405. ITQ = intent to quit; P&R = pay and rewards; PD = perceptions of discrimination; MR = material resources; OT = orientation training; WV = workplace violence; PCP = patient care plans.

Examination of the seven ANOVAs shows that the dependent variable ITQ (intent to quit) and the independent variable OT (orientation training) are not statistical significant, resulting in no differences among the seven facilities, signifying that the survey participants perceptions were generally the same. The effect sizes of .019 and .005, respectively, indicate that the effect sizes are extremely small, resulting in no practical significance as well.

Analysis of the remaining five variables (pay and rewards, material rewards, perceptions of discrimination, workplace violence, and patient care plans) does indicate statistical significance, and the survey participant's perceptions are mixed. Four of the five variables (P&R, PD, WV, and PCP) indicate small effect sizes, resulting in extremely small or no practical significance. The remaining variable (MR) had a slightly medium effect size (.182), which showed practical significance. In an attempt to

eliminate the sampling error, a corrected effect size (omega squared) was calculated, indicating an effect size of (.172), reflecting a slightly medium effect size.

A possible reason for the moderate difference in the MR variable could be due to the fact that all of the seven facilities used in this study had different architectural design features (i.e., single floor, two story, multiple buildings), as was the fact that receipt of needed supplies was not exactly the same in each facility; however, all facilities have the same ordering and receiving process because they are state owned and operated long-term care facilities. The only difference is the distribution (D. Webb, personal communication, March 22, 2007).

Although there were minor differences among the facilities, the decision was made based on the researcher's opinion to collapse the data and analyze all the nursing homes as originally planned.

Hypothesis analysis

Two of the seven variables were reverse coded with the other variables, specifically OT (33-40) and PCP (46-50). The other five variables (ITQ, P&R, PD, MR, and WV) were coded with a 6, indicating low satisfaction and a 1, indicating high satisfaction. OT and PCP were coded with a 1, indicating low satisfaction and a 6, indicating high satisfaction. To make understanding the data easier, both of these variables were reverse coded to better align with the other five variables.

Analysis of the hypothesis for this study was accomplished through the use of a multiple regression. The hypothesis for this study is as follows:

H_o1: There is no statistically significant relationship between NAs' intention to quit and patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training.

$$Y = \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6$$

A multiple regression analysis was performed, with intent to quit regressed on patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training. The regression analysis (see Table 7) rejects the null hypothesis, indicating that the regression is statistically (*F* value of 14.591, $p < .001$) and practically significant ($R^2 = .183$). The adjusted R^2 (.171) also indicates that little sampling error was involved in the analysis and an almost negligible change in effect size when considering replicability. The relationship between predictors and intent to quit is statistically and practically significant, as the set of predictor variables accounts for over 18% of the variance in predicted intentions to quit.

Table 7

PCA Perceptions Utilizing Re-coded Data

	SS	*df*	*MS*	*F*	*P*	R^2	*Adj.* R^2
Regression	139.520	6	23.253	14.917	<.001	.183	.171
Residual	621.973	399	1.559				
Total	761.493	405					

An analysis of beta weights and structure coefficients was performed (see Table 8) to determine the amount of predictive/explanatory credit the correlated independent variables have (Thompson, 2006) and to determine the level to which each of the subjective gain scores predicts a change in the objective measurement difference (Henson, 2002). According to Thompson, "One must look at both β and structure coefficients when evaluating the importance of a predictor" (p. 233). Because the predictor variables were not perfectly correlated, structure coefficients were calculated by computing the correlation between the respective independent variables and the intent to quit variable predicted by the regression formula.

Table 8

Regression Analysis Results for Predicting Intent to Quit Perceptions

Predictor	*R*	R^2	*Adjusted* R^2	*beta*	*p*	r_s	*p*	r_s^2
Model 1	.428	.183	.171					
P & R				.323	<.001	.857	<.001	.7344
PD				-.001	.986	.266	<.001	.0707
MR				.002	.964	.362	<.001	.1310
OT				-.083	.075	-.152	.002	.0231
WV				.110	.026	.479	<.001	.2294
PCP				.182	<.001	.469	<.001	.2199

Note. F_{calc} for regressing intent to quit on patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training is 14.591, p<.001. P&R = pay and rewards; PD = perceptions of discrimination; MR = material resources; OT = orientation training; WV = workplace violence; PCP = patient care plans. r_s = structure coefficient. r_s^2 = squared structure coefficient.

The variables, by examining only beta weights that are most salient to intent to quit variance, indicate that the variables *pay and rewards, workplace violence* and *patient care plans* receive the largest credit in predicting intent to quit (beta weights of .323, .110 and .182, respectively). However, examining beta weights in parallel with squared structured coefficients indicates that not only is the variable *pay and rewards* the primary contributor to the regression equation, it also accounts for over 73% of the synthetic predictor variable. Similarly, the variables *workplace violence and patient care plans* receive substantial credit in the regression equation and account for a significant amount of variance in the regression equation, with squared structured coefficients of 22.94% and 21.99%, respectively. The remaining three variables (PD, MR, and OT) show small beta weights, indicating that they do not receive substantial credit in the regression equation.

Commonality Analysis

In an attempt to explain the common and unique contributions of this study's independent variables, commonality coefficients were computed using an S-Plus program (Nimon, 2007). A calculated R^2 can be partitioned into components representing the unique and combined usefulness of the variables under analysis utilizing the formula 2^k-1 (where k = number of predictors) (Haynes, 2007; Mood, 1969), resulting in 63 components for this study. To gather the information needed to conduct the multiple regression commonality analysis, a series of multiple regressions was run, with each single predictor and each unique combination of predictors used to assess the dependent variate. Once these results were calculated, the unique and common

partitions of variance assigned to each independent variable and combination of independent variables were computed (Kane, 2007).

Table 9 lists all the results obtained from the commonality analysis. The results clearly show that pay and rewards uniquely explained 8.98% of the variance in the dependent variable. Workplace violence uniquely explained 1.02% of the variance in the dependent variable, and patient care plans uniquely explained 3.11% of the variance in the dependent variable. Combined, these three individual variables accounted for 13.11% of the variance in the dependent variable, leaving the other three variables and the commonality among variables to account for the remaining 5.19% of the variance in the dependent variable.

Table 9

Commonality Summary Table

Unique and common effects	P & R	PD	MR	OT	WV	PCP
Unique to variable	.0898	0	0	.0065	.0102	.0311
Common to (P&R and PD)	.0014	.0014				
Common to (P&R and MR)	.0054		.0054			
Common to (PD and MR)		0	0			
Common to (P&R and OT)	.0024			.0024		
Common to (PD and OT)		0		0		

(*Table continues*)

Unique and common effects	P & R	PD	MR	OT	WV	PCP
Common to (MR and OT)			0	0		
Common to (P&R and WV)	.0107				.0107	
Common to (PD and WV)		.0007			.0007	
Common to (MR and WV)			.0002		.0002	
Common to (OT and WV)				.0015	.0015	
Common to (P&R and PCP)	.0035					.0035
Common to (PD and PCP)		0				0
Common to (MR and PCP)			.0008			.0008
Common to (OT and PCP)				-.0040		-.0040
Common to (WV and PCP)					.0011	.0011
Common to (P&R, PD, and MR)	.0013	.0013	.0013			
Common to (P&R, PD, and OT)	-.0004	-.0004		-.0004		
Common to (P&R, MR, and OT)	-.0004		-.0004	-.0004		

(*Table continues*)

Unique and common effects	P & R	PD	MR	OT	WV	PCP
Common to (PD, MR, and OT)		0	0	0		
Common to (P&R, PD, and WV)	.0045	.0045			.0045	
Common to (P&R, MR, and WV)	.0042		.0042		.0042	
Common to (PD, MR, and WV)		.0002	.0002		.0002	
Common to (P&R, OT, and WV)	.0013			.0013	.0013	
Common to (PD, OT, and WV)		-.0002		-.0002	-.0002	
Common to (MR, OT, and WV)			-.0001	-.0001	-.0001	
Common to (P&R, PD, and PCP)	-.0002	-.0002				-.0002
Common to (P&R, MR, and PCP)	.0048		.0048			.0048
Common to (PD, MR, and PCP)		0	0			0
Common to (P&R, OT, and PCP)	-.0010			-.0010		-.0010
Common to (PD, OT, and PCP)		0		0		0
Common to (MR, OT, and PCP)		-.0002		-.0002		-.0002
Common to (P&R, WV, and PCP)	.0009				.0009	.0009

(*Table continues*)

Unique and common effects	P & R	PD	MR	OT	WV	PCP
Common to (PD, WV, and PCP)		-.0001			-.0001	-.0001
Common to (MR, WV, and PCP)			.0009		.0009	.0009
Common to (OT, WV, and PCP)				-.0005	-.0005	-.0005
Common to P&R, PD, MR & OT	-.0002	-.0002	-.0002	-.0002		
Common to P&R, PD, MR & WV	.0038	.0038	.0038		.0038	
Common to P&R, PD, OT & WV	0	0		0	0	
Common to P&R, MR, OT & WV	.0001		.0001	.0001	.0001	
Common to PD, MR, OT & WV		-.0001	-.0001	-.0001	-.0001	
Common to P&R, PD, MR & PCP	.0005	.0005	.0005			.0005
Common to P&R, PD, OT & PCP	.0001	.0001		.0001		.0001
Common to P&R, MR, OT & PCP	-.0001		-.0001	-.0001		-.0001
Common to PD, MR, OT & PCP		0	0	0		0
Common to P&R, PD, WV & PCP	.0002	.0002			.0002	.0002

(*Table continues*)

Unique and common effects	P & R	PD	MR	OT	WV	PCP
Common to P&R, MR, WV & PCP	.0016		.0016		.0016	.0016
Common to PD, MR, WV & PCP		.0003	.0003		.0003	.0003
Common to P&R, OT, WV & PCP	-.0004			-.0004	-.0004	-.0004
Common to PD, OT, WV & PCP		.0001		.0001	.0001	.0001
Common to MR, OT, WV & PCP			0	0	0	0
Common to P&R, PD, MR, OT & WV	0	0	0	0	0	
Common to P&R, PD, MR, OT & PCP	.0001	.0001	.0001	.0001		.0001
Common to P&R, PD, MR, WV & PCP	.0011	.0011	.0011		.0011	.0011
Common to P&R, PD, OT, WV & PCP	0	0		0	0	0
Common to P&R, MR, OT, WV & PCP	-.0002		-.0002	-.0002	-.0002	-.0002
Common to PD, MR, OT, WV & PCP		0	0	0	0	0
Common to P&R, PD, MR, OT, WV & PCP	-.0001	-.0001	-.0001	.0001	-.0001	.0001

Note. All 63 variable combinations have been summed, and they equal the R^2 from the original multiple regression.

Another multiple regression was run to determine the effect size with just the three variables (P&R, WV, and PCP), which accounted for the most variance in the intent to quit dependent variable. Table 10 lists the results from the regression. The results indicate that the three variables (P&R, WV, and PCP) account for 17.7% of the variance in intentions to quit of nursing assistants working in state-owned and operated veteran's long-term care facilities.

Table 10

PCA Perceptions Utilizing P&R, WV, and PCP

Predictor	*R*	R^2	*Adjusted* R^2	*beta*	*p*	r_s	*p*	r_s^2
Model 1	.420	.177	.170					
P & R				.325	<.001	.873	<.001	.7621
WV				.116	.014	.488	<.001	.2381
PCP				.167	<.001	.477	<.001	.2275

Note. F_{calc} for regressing intent to quit on patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training is 28.591, p<.001. P&R = pay and rewards; WV = workplace violence; PCP = patient care plans. r_s = structure coefficient. r_s^2 = squared structure coefficient.

Summary

Chapter 4 has addressed the data collected and the statistical tests performed, including a series of one-way ANOVAs utilizing measures of effect size to determine practical significance and multiple regression analysis to substantiate the hypothesis. The sole hypothesis was rejected. Chapter 5 provides a summary of the study, a discussion of the significance of the findings, and recommendations for future research.

CHAPTER 5

SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The purpose of this study was to examine a select set of organizational variables and to determine their relationship to nursing assistants' intentions to quit in state-owned veterans long-term care facilities located across the United States. The following is a summary and discussion of the study results.

Summary of Study

The goal of this study was to assess the link between nursing assistants' intention to quit with their perceptions of satisfaction regarding patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training in an attempt to reduce the turnover that has been and is still plaguing this staff position in the long-term care industry. As Cohen-Mansfield (1997) emphasized, "Before any attempt is made to reduce high turnover, administration must be aware of areas of concern to nursing staff" (p. 64).

Determining the variables that impact staff and result in their quitting has long been a focus of study. Cotton and Tuttle (1986) concluded that research is needed on employee turnover which includes the industry, but, more importantly, the employees, the population, and the related variables associated with the industry. This study focused on the state-owned veterans long-term care nursing homes and variables directly linked to turnover in previous studies. As Harrington and Swan (2003) noted,

nursing facilities that focus their efforts on retention and staff by addressing factors related to turnover and wages, may provide stability to their workforce.

Seven state-owned veterans long-term care facilities participated in this study. They represented the entire number in the state of Oklahoma, allowing the researcher to investigate NA intentions to quit across the entire state. Printed survey packages administered by the researcher were used to gather data from the 410 survey participants.

Discussion of Results

Results compiled from survey responses were used to address the one hypothesis stated for this study and are discussed here.

H_o1: There is no statistically significant relationship between NAs' intention to quit and patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training.

The null hypothesis has been rejected, indicating that there are statistically significant relationships between the dependent variable, intentions to quit, and the six independent variables (patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training). Of the six variables studied, pay and rewards, workplace violence, and patient care plans received the most credit in the regression equation and accounted for a significant amount of variance in the regression equation.

Of the six variables studied in this study, pay and rewards were shown to have the highest relation of NA intentions to quit; uniquely explaining 8.98% of the variance in the dependent variable (see Table 9). Other works have suggested that pay and

rewards are among the most important predictors of intentions to quit. Harrington (1990) noted that low wages and benefits directly contribute to high turnover in nursing homes and that this directly impacts staffing levels and resident quality of care. The U. S. Department of Health and Human Services (2001) noted that NAs are among the most essential component in helping older persons and younger people with disabilities maintain some level of function and quality of life. The U. S. Department of Health and Human Services further noted that increasing salaries and improving benefits helped reduce turnover rates by up to 44%.

The NAs in this study felt they were not being paid a fair amount for the work they do. Of the 406 survey respondents, 299 (74%) indicated they were not satisfied with their pay amount. Raises were considered too few, with 342 (84%) indicating they were not satisfied with the frequency of the raises. Question 20 (pay and rewards independent variable) was added by the researcher to determine whether the NAs were satisfied with the frequency of the pay periods. Of the 406 survey participants who answered this question, 282 (69%) indicated that they were not satisfied with the frequency of the pay periods. This result indicates that changing the pay periods from monthly to bi-monthly may alleviate the intent to quit perceptions of NAs. This study's findings provide evidence that pay and rewards are moderately related to NA intentions to quit. The findings indicate that increasing the pay of the NAs should reduce the intentions to quit of these front-line members of the long-term care workforce.

Patient care plans uniquely explained 3.11% (see Table 9) of the variance in the dependent variable, indicating that more NA access to the PCPs might aid in the reduction of NA turnover. Banaszak-Holl and Hines (1996) reported that nursing homes

that involved nursing assistants in care planning can dramatically reduce turnover rates, at times as much as 50%. Gates, Fitzwater, and Meyer (1999) noted that before caring for a resident, NAs often have no information regarding the resident's condition, social history, or information regarding family dynamics. This study confirms these results.

The NAs in this study felt that they were not provided with all the information they needed regarding residents. Of the 406 survey respondents, 253 (62%) responded that they were not satisfied with the resident information they received, and 310 (76%) indicated that they did not attend resident care planning meetings. This indicates a lack of time to read the PCP, possibly due to staff shortages.

These findings provide evidence that patient care plans contribute to NA intentions to quit. As noted earlier, pay and rewards are moderately related to intent to quit. If pay and rewards were increased, this could significantly reduce the amount of turnover, allowing the NAs opportunities to review the patient care plans.

Workplace violence, uniquely explaining 1.02% of the variance in the dependent variable, was the next related variable indicating NA intentions to quit. Levin et al. (2003) suggested that assaults impact the overall environment of the long-term care facility through decreased quality resident care and attrition. McGuire et al. (2006) suggested that harassment has a negative effect on the workplace environment and affects retention. This study confirms this assertion. Of the NAs in this study, 319 (79%) reported they had been yelled at by residents, and 225 (55%) had been threatened by residents within the last 6 months. Unwanted sexual harassment was reported by 49% (199) of the NAs, indicating that they had experienced some forms of sexual harassment.

Over 66% (272) of the NAs reported that they had experienced conflict between what they needed to do and what the residents wanted them to do, and 53% (215) of the NAs reported that the residents had made unreasonable demands on them. These findings provide evidence that workplace violence is a contributor of NA intentions to quit.

The three remaining variables (perceptions of discrimination, material resources, and orientation training) account for only .65% (see Table 9) of the unique variance in the dependent variable, with orientation training accounting for all of the unique variance, indicating that they do not account for any significant amount of variance in the regression equation. Table 9 further illustrates that there are no common effects between these three variables indicating no relationship to intent to quit perceptions of NAs.

Even though 51% (206) of the NAs reported they had heard residents make racial or ethnic remarks directed at NAs, the independent variable PD (perceptions of discrimination) proved to have no predictive value in intentions to quit of NAs. This study does support the findings of Gates et al. (1999) that racial slurs are commonplace. The independent variable MR (material resources) proved to have no predictive value in intentions to quit of NAs. 286 (70%) of the NAs reported they had all the necessary work materials (such as lift equipment, feeder tables, and ergonomic computer equipment). This study does support the findings of Brennan and Moos (1990) that turnover is greatest when there are fewer prosthetic aids.

The variable OT (orientation training) accounted for .65% (see Table 9) of the unique variance. Even though 93.3% (379) of the NAs reported they had all the basic

nursing skills to do a good job and necessary to organize their daily workload, the OT independent variable proved to have practically no predictive value in intentions to quit of NAs this study. This study does indicate that training accomplished on site appears to have the intended effect of reducing the amount of new NA turnover.

An interesting development occurred regarding the collecting of the data. A comments block was provided at the end of the survey instrument. The participants were told that if they wanted their facility administrator to read any comments, they should write them down, and the researcher would type them in the computer and e-mail the comments to the administrator. The participants were assured that the only person who would see the actual survey would be the researcher. They were informed that their administrator would see only the typed-in anonymous comments e-mailed to them. Of the total surveys collected (410), 280 provided totally voluntary comments (68%), suggesting that they wanted their voices heard (see Table 11).

Comments such as the pay amount is low (54 entries), wanting more frequent pay periods (47 entries), lack of respect for the NAs (78 entries), lack of NA teamwork/respect for each other (56 entries) and aides not being listened to regarding resident health/condition (19 entries) were noted. One comment which surprised the researcher was the lack of aide teamwork/respect for each other (56 entries). The researcher, while performing duties as an Ombudsman volunteer, had not witnessed this negative interaction among the NAs. This comment indicates that a lack of empathy among workers can lead to negative interpersonal climates which may encourage workers to look for other jobs (HHS, 2001).

Table 11

Voluntary Comment Percentage (Actual Study)

Total Comments	Total surveys collected	% providing comments
280	410	68%

Suggestions for Future Research

This study parallels findings of previous studies of federally owned and private sector long-term care facilities but provides a foundation for future research related to the perceptions of intentions to quit of nursing assistants (NAs) working in state-owned veterans long-term care facilities by providing primary data regarding NAs intentions to quit. Results of this study indicate that NA intentions to quit will be reduced provided pay and rewards are increased, workplace violence is addressed, and better access to patient care plans is provided.

This study focused on intentions to quit in state-owned veterans long-term care facilities. It is suggested that future research be performed using populations of individuals from other segments of the long-term care industry, mainly, for-profit institutional care nursing homes, and federally owned veterans long-term care facilities. From this type of replication study, comparisons might then be made to determine whether the relationship between the dependent variable and the independent variables studied in this study exists in other segments of the industry.

Due to possible respondent burden, specifically, survey fatigue (Barnette, 1999), this study should be replicated with a shorter instrument focusing on pay and rewards, patient care plans, and workplace violence. This would target the three variables

identified in this study as most salient to intent to quit, and it would utilize a much smaller survey size, perhaps reducing participant fatigue. Several reasons exist as to why respondents may not complete the survey or not pay as much attention as is required, simply wanting to finish the survey as quickly as possible or becoming fatigued while completing the survey (Barnette, 1999). This survey had a total of 50 questions, 45 of which were actual questions regarding their perceptions. According to Porter, Whitcomb, and Weitzer (2004), previous research has found that longer surveys result in lower response rates. Future studies should also carefully determine the optimal timeframe to administer surveys. The more times a person is surveyed, the more unfavorable the method becomes (Goyder, 1986).

As evidenced by the large number of unsolicited comments the NAs provided, additional studies should be completed focusing on NA comments gathered by a third-party researcher and comparing them to exit interviews. Exit interviews utilized to determine why NAs were quitting might not be the preferred method. Mobley (1982) observed that “due to the individual’s tendency to rationalize and report selectively, retrospective exit-interview analyses are not substitutes for predictive analyses” (p. 80). Phillips and Connell (2003) noted that “exit interviews are notoriously inaccurate and unreliable” (p. 117). According to Mathis and Jackson (2006), the exit interview may result in differing answers, depending on who conducts it.

As noted previously, the researcher, while performing duties as an Ombudsman volunteer, had not witnessed the lack of NA teamwork/respect for each other. This comment indicates that future studies should study the relationship with coworkers as noted in Figure 1.

Future studies should segment the residents into cognitively impaired and those who are cognitively intact to determine how much of a predictor workplace violence actually is when these categories are utilized. This would address the issue of whether to train the NAs to be better prepared to deal with cognitively impaired residents or whether some form of training should be presented to cognitively intact residents in order to stop the abuse of NAs. This study did not differentiate whether the residents who were causing the perceptions of workplace violence to the NA were cognitively impaired or not; therefore, this study cannot make generalizations to all residents of veterans long-term care facilities.

As noted in chapter 1, by the year 2020, the percentage of individuals aged 65 or older is projected to increase to 16.3%, equaling one in six Americans. This will result in an increase of 20 million more elderly than there were in the year 2000. By the year 2040, the number of persons aged 85 years and older is projected to increase more than 250%, from 4.3 million in 2000 to 15.4 million (GAO, 2005a). Understanding what can be done to slow the turnover in these facilities is vital to the continued quality of life for residents of long-term care facilities.

Conclusions

The purpose of this study was to examine a select set of organizational variables and determine their relationship to nursing assistants' intentions to quit in state-owned veterans long-term care facilities located across the United States. This study focused on assessing the link between nursing assistants' intention to quit with their perceptions of satisfaction regarding patient care plans, pay and rewards, workplace violence, perceptions of discrimination, material resources, and orientation training in an attempt

to reduce the turnover that has been and is still plaguing this staff position in the long-term care industry.

The researcher is not aware of any similar study that has investigated nursing assistants' perceptions of intentions to quit in the manner followed by this study. Thus, it can provide a starting point for future research that may help state-owned veterans long-term care facilities to identify the variables that relate the most to NA intentions to quit. Furthermore, this research is useful to state-owned and operated long-term care facilities by giving them additional insights into nursing assistants' intentions to quit perhaps resulting in lower rates of turnover.

APPENDIX A

RESEARCHER CREDIBILITY

Researcher Credibility

The researcher is a long term care Ombudsman volunteer with over 3 years in this position. This individual (in the state of Oklahoma) is certified by the Oklahoma Department of Human Services. In order to obtain certification a background investigation is accomplished as well as 10-12 initial hours of training followed by monthly training sessions.

The official duties of an Ombudsman Volunteer are as follows:

> Long-term care ombudsmen are advocates for residents of nursing homes, board and care homes, assisted living facilities and similar adult care facilities. LTC ombudsmen advocate on behalf of individuals and groups of residents, provide information to residents and their families about the long-term care system, and work to effect systems changes at the local, state and national level. They provide an on-going presence in long-term care facilities, monitoring care and conditions and providing a voice for those who are unable to speak for themselves (Administration on Aging, 2006).

The number one complaint this researcher has received from residents is the constant changing of the staff members. The residents get used to one NA only to have that staff member quit or rotate to another part of the facility due to short staffing.

APPENDIX B

PERMISSION TO CONDUCT THE STUDY

PHILLIP L. DRISKILL
EXECUTIVE DIRECTOR

BRAD HENRY
GOVERNOR

STATE OF OKLAHOMA
DEPARTMENT OF VETERANS AFFAIRS

November 21, 2006

Mr. Chris Wike
458 S.W. Big Bow Road
Indiahoma, Oklahoma 73552

Dear Mr. Wike:

This is your approval to conduct a survey for the collection of data at the seven Oklahoma Veterans Centers located at Ardmore, Claremore, Clinton, Lawton, Norman, Sulphur, and Talihina. It is my understanding this data will be collected via a survey given to the PCA's in each of the centers during staff meetings or training sessions. Participation will be voluntary, and the survey is to be used to gather information regarding their perceptions of satisfaction (i.e. training, pay and rewards, material resources, perceptions of discrimination, workplace violence, and access to care plans).

We look forward to reviewing the results of the survey. If we can be of further assistance, please let us know.

Sincerely,

Phillip L. Driskill
Executive Director

PLD:kl

cc: Administrators, Oklahoma Veterans Centers

APPENDIX C

IRB APPROVAL

UNT
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RESEARCH AND TECHNOLOGY TRANSFER
Office of Research Services

December 8, 2006

Christopher Wike
Department of Technology & Cognition
University of North Texas

RE: Human Subjects Application No. 06-440

Dear Mr. Wike:

In accordance with 45 CFR Part 46 Section 46.101, your study titled "Intent to Quit Perceptions of Nursing Assistants Working in Oklahoma State Veterans Administration Owned and Administered Nursing Homes" has been determined to qualify for an exemption from further review by the UNT Institutional Review Board ((IRB).

Enclosed is the consent document with stamped IRB approval. Please copy and **use this form only** for your subjects.

No changes may be made to your study's procedures or forms without prior written approval from the UNT IRB. Please contact Shelia Bourns, Research Compliance Administrator, ext. 3940, if you wish to make any such changes.

Sincerely,

Scott Simpkins, Ph.D.
Chair
Institutional Review Board

SS:sb

P.O. Box 305250 | Denton, Texas 76203-5250 | TEL 940.565.3940 | FAX 940.565.4277 | TTY 940.369.8652 | www.unt.edu

UNT
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January 4, 2007

RESEARCH AND TECHNOLOGY TRANSFER
Office of Research Services

Christopher Wike
Department of Technology and Cognition
University of North Texas

Institutional Review Board for the Protection of Human Subjects in Research (IRB)
RE: Human Subject Application #06-440

Dear Mr. Wike:

The UNT IRB has received your request to modify your study titled "Intent to Quit Perceptions of Nursing Assistants Working in Oklahoma State Veterans Administration Owned and Administered Nursing Homes." As required by federal law and regulations governing the use of human subjects in research projects, the UNT IRB has examined the request to change questions in the survey instrument of this research study. The modification to this study is hereby approved for the use of human subjects. **Approval for this project is December 8, 2006 through December 7, 2007.**

It is your responsibility according to U.S. Department of Health and Human Services regulations to submit annual and terminal progress reports to the IRB for this project. Please mark your calendar accordingly. The IRB must also review this project prior to any other modifications made. **Federal policy 21 CFR 56.109(e) stipulates that IRB approval is for one year only.**

Please contact Shelia Bourns, Research Compliance Administrator, at (940) 565-3940, or Boyd Herndon, Director of Research Compliance, at (940) 565-3941, if you wish to make changes or need additional information.

Sincerely,

Scott Simpkins, Ph.D.
Chair
Institutional Review Board

SS/sb

O. Box 305250 | Denton, Texas 76203-5250 | TEL 940.565.3940 | FAX 940.565.4277 | TTY 940.369.8652 | www.unt.edu

APPENDIX D

INFORMED CONSENT NOTICE

University of North Texas Institutional Review Board

Informed Consent Notice

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

Title of Study: Intent to Quit Perceptions of Nursing Assistants working in Oklahoma State Veterans Administration Owned and administered Nursing Homes.

Principal Investigator: Christopher L Wike, a graduate student in the University of North Texas (UNT) Department of Applied Technology, Training & Development.

Purpose of the Study: You are being asked to participate in a research study which involves completing a questionnaire about the perceptions of satisfactions of nursing assistants working in State Veterans Administration Owned and administered Nursing Homes.

Study Procedures: You will be asked to complete a questionnaire that will take less than 20 minutes of your time.

Foreseeable Risks: No foreseeable risks are involved in this study.

Benefits to the Subjects or Others: We expect the project to benefit you and other nursing assistants by helping improve the working conditions and satisfaction of nursing assistants working in State Veterans Administration Owned and administered Nursing Homes.

Procedures for Maintaining Confidentiality of Research Records: You will not be asked for any information that will make your survey answers personally identifiable. The data gathered will be coded and maintained in a confidential database. The confidentiality of all data sources will be maintained in any publications or presentations regarding this study.

Questions about the Study

If you have any questions about the study, you may contact Christopher L. Wike at frsdecoy@hotmail.com, or Dr. Jerry Wircenski, Applied Technology, Training & Development program, at 940-565-2714.

Review for the Protection of Participants:

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

Research Participants' Rights:

- The study has been explained to you and all of your questions have been answered. You have been told the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You have been told you will receive a copy of this form.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

For the Principal Investigator or Designee: I certify that I have reviewed the contents of this form with the participant signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

_____ _____
Signature of Principal Investigator or Designee Date

APPROVED BY THE UNT IRB
FROM 12/8/06 TO 12/7/07

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